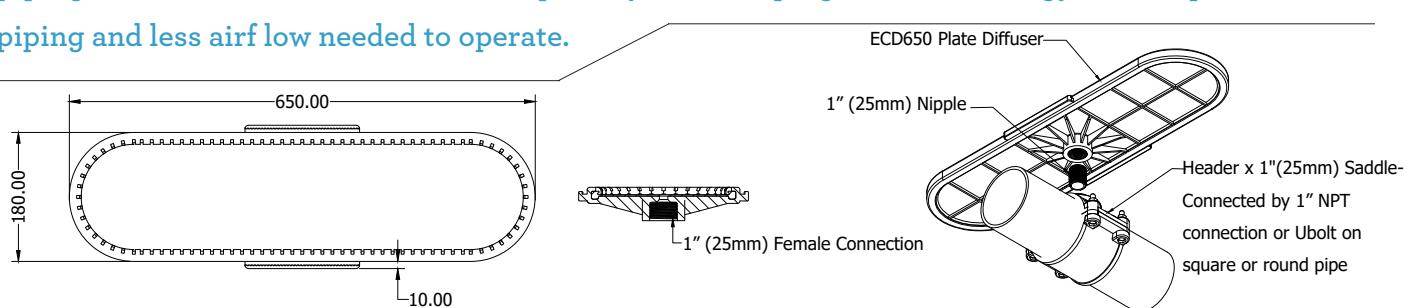


# SSI ECD650 Plate Diffuser Systems– A Global Success Story

The SSI ECD650 Plate Diffuser System combines engineering excellence, superior component quality, and a technically advanced product design. Proven highly durable and efficient in thousands of municipal and industrial installations around the world, this advanced system has reliability built into every stage of performance. SSI's ECD650 comes in several membrane materials including our patented PTFE membrane, designed to use less energy and require minimal maintenance. The diffuser base is molded with virgin ABS Plastic for extended performance. SSI's ECD650 diffusers offer higher airflow at 5.0-8.0 SCFM (8.0-13.0 Sm<sup>3</sup>/hr), with the same efficiency with more surface area covered than a 12" disc diffuser. This means less piping, and lower cost overall for a complete system. Helping to reduce energy consumption with far less piping and less airf low needed to operate.



# Unique System Strengths

## Complete product line – creating the system that fits your needs

SSI manufactures disc diffusers and coarse bubble diffusers, and we mount these products on a wide range of piping materials including PVC, CPVC, PP and Stainless Steel. We have the ability to attach diffusers to pipe using saddles, grommets, or pre-assembled PODS. We can provide retrievable systems or fixed grids, and systems in kit form or mostly factory assembled. We try to understand and anticipate your needs, and fit our recommendations to your situation.

## Piping system integrity – thicker wall pipe and double anchors for fewer breakages

Our piping is 38% thicker and has double rod support stands as standard – two anchors for each support location means twice the resistance to hydraulic and thermal loads. Most often supports fail due to temperature and water velocity. SSI locates two anchors where support is needed most, helping to increase product longevity.

## Comprehensive design service and after sales support

SSI provides full design services, including biological and mixing calculations, process simulations and hydraulic studies. We maintain a full drafting department with 3D and animation capabilities and we can assist with specifications and CAD drawings. Our service and installation crew can hold your hand during the early stages of the project and our worldwide multilingual staff is dedicated to your complete satisfaction.

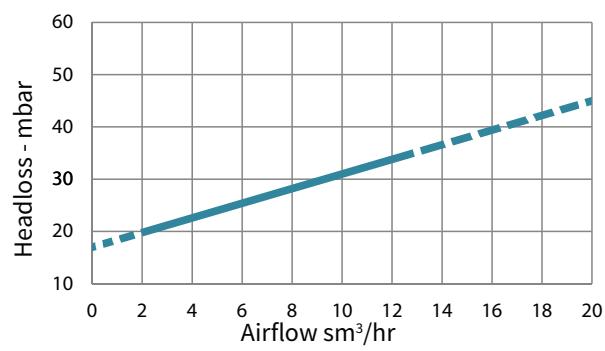
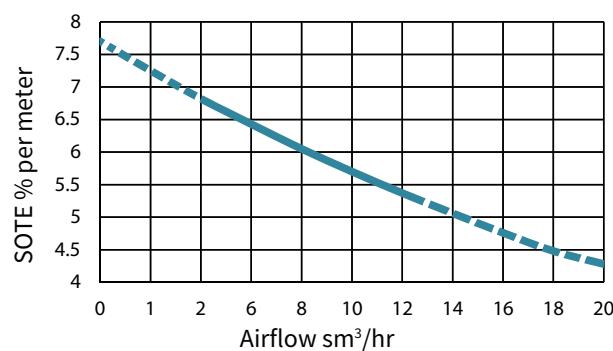
## Intelligent Upgrade Options

### Patented PTFE membranes prolong efficiency and reduce whole-life costs

SSI's patented PTFE membrane barrier properties not only reduce plasticizer extraction, shrinking, and membrane hardening but also limit dynamic changes that can result from swell, such as creep. Compared with uncoated products that are more susceptible to increases in DWP due to more aggressive fouling and changes in physical properties and weight, the PTFE coated membrane improves consistency of DWP (Headloss) values over the product life. This directly impacts long-term power costs and the ability of the system to distribute air uniformly across the tank floor.

Avg Operating Condition per Diffuser	Peak Air Flow per Diffuser	Orifice Size	Active Surface Area per Diffuser	Weight per Diffuser ECD650
2.0 - 8.0 SCFM 3.4 - 13.6 Sm <sup>3</sup> /hr	12 SCFM 20 Sm <sup>3</sup> /hr	3/8" 10mm	0.86 ft <sup>2</sup> 0.08 m <sup>2</sup>	2.64lbs 1.2 kg

Plate diffuser can operate at low flow rates close to zero [+/-1.5 SCFM / +/- 2.5 Sm<sup>3</sup>/hr] in such conditions air distribution may not be uniform and at higher rates fouling are possible so routine bumping / flexing may be appropriate.



Above curves are for reference only. Specific condition applicable for project should be provided along with submittals.